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Comment

Volunteers as explainers at the Finnish Science Centre Heureka

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Heureka is situated in the Helsinki Metropolitan area. Every year, on average, 300.000 visitors come to Heureka; it is one of the largest year-round attractions in the area. 20–25% of the visitors are school classes.

Heureka has a main exhibition including Children's Heureka and also always houses two temporary exhibitions. Special activities supplement the exhibitions: The Verne Theatre, Children's Laboratory, The Open Laboratory, Science Theatre Minerva and the Basketball Rats.

Explainers at Heureka

At Heureka, we have six full-time explainers, roughly 19 science students in part-time jobs and between 60–70 volunteers as explainers. Two of the explainers are senior explainers; one of them is responsible for the resources, shift schedules and daily schedules and the other one is responsible for the science theatre and the planetarium programmes. One explainer is the co-coordinator of the volunteer services, one is responsible for the laboratories and the basketball rats, one for the science camps and one for the theatre activities with scientific content.

The full-time explainers are responsible for the development of the school programmes and the implementation of them. Yearly there are approximately 10 different programmes for schools. Half of the part-time explainers work with the basketball rats and the other half works during week-ends, high seasons and summers, explaining in the exhibitions, demonstrations and science camps. The volunteers mainly work in the exhibitions helping visitors with physical interactions and giving information about the science behind the demonstrated phenomena. Actually there are three layers of science communicators composed of both experts and lays.

Why volunteers?

Why do we want volunteers as explainers in our science centre? Can volunteers be even more effective and valuable than salaried staff? Volunteers are not simply a way of saving money; volunteers extend your budget and bring many added values. If volunteers provide direct service to customers, they have the option to focus intensively on particular issues or visitors, they can specialize and bring the luxury of focus.

According to ASTC (Association of Science-Technology Centers, more than 400 hands-on science museums around the world as members) member statistics in 2004, the total number of volunteers in the US was 28.968 and the contribution in working hours was of 2.44 million hours. In 17 other countries, mainly in Europe, the number was 4.630 persons and 408.285 hours.

Why did we start our volunteer programme at Heureka? One reason was the wide use of volunteers in the US But there were several other reasons as well. The paid explainers are young, well educated and learn new things easily. Because of the wide range of visitors, we wanted to add experience to the otherwise young explainers profile. The goal was to have a total of 60–70 volunteers, which guarantees expertise in a wide range of fields. Because of the personal involvement, the volunteers are also

M. Väkeväinen

expected to have a fresh and enthusiastic attitude towards our mission. Enthusiasm and expertise are qualities that money cannot always buy. In the visitors' eyes the credibility of the message stated by a volunteer can be high. Volunteers also give an outsider's view, which is healthy in evaluating your own activities. It has also proved to be an interesting way of networking with other associations and societies. Most of our volunteers are also involved in other associations and thereby we get direct contacts to a wide range of influential quarters and customer groups.

A wise management should appreciate the volunteers' freedom to criticize – fresh criticism is good for any organization.

A short history of our volunteer programme

We started our volunteer programme in 1998 with 11 retired nurses. We were planning an exhibition on basic human biology called *Me and You*. We realized that nurses have the required knowledge and they are known for their good social skills. We ran the volunteer programme as a pilot project for one year and trained the nurses very extensively. After that we started recruiting new volunteers and the desired number of 70 volunteers was reached in 2002.

The sources of recruitment in 2001 were as follows:

- 19 mailing and invitation to Heureka
- 11 hint from a friend
- 8 articles in newspapers and magazines
- 3 advertisement in the Verne theatre
- 2 mailing
- 2 website
- 2 former employees
- 1 radio

Today, our website is the most important source. After many years of active recruitment efforts, most volunteers now make the first contact themselves. For temporary exhibitions we have separate recruitment campaigns. For the *Flight!* exhibition, for instance, we recruited an airhostess, a captain and other personnel from our national airline company.

The contribution of the volunteers in person-years of work is on average 4, which means 2.9 persons per day in the exhibitions.

The importance of 4 person-years of work is of course much more important than the statistics itself. Since 60–70 persons are involved, the life experience of these persons together is 3500 years. These 4 person-years of work bring along 256 years of vocational or university education, as well as several work-related courses and education.

The background of the volunteers

The background of the volunteers varies a great deal. Their age, for one thing, is between 18 –72 years. Their educational background varies from academic to basic education. At the moment, 16 of the volunteers are teachers or headmasters by profession. There are seven nurses; an impressive total of five of the pilot scheme nurses still work with us, so they have worked almost eight years as volunteers at Heureka. Some examples of other professions are: student, engineer, technician, commercial graduate, PR-officer and office employee. Some have backgrounds in customer service, banking, tourism and accounting.

Some volunteers are qualified more as hosts and some are qualified for deeper science communication. Science centers are for all and the diverse backgrounds of the volunteers give us the opportunity to communicate science on many levels. 55% of the volunteers are officially retired, 15% are still working and 11% are either on maternity leave, not working or unemployed.

Training

The volunteers take part in a nine-hours introduction lecture series held by the management of Heureka. The topics are for example the "director's hour", the planning of science centre exhibitions, customer security questions and PR and marketing. The same introduction lectures are also meant for the new personnel. The whole management's involvement in the programme is very important.

After this, the volunteers have 2–3 days of in-house training in the exhibitions. Since we have two temporary exhibitions during one year, there are also two training sessions for temporary exhibitions every year. The volunteers have a yearly meeting where common issues are discussed and an excursion to some other museums takes place.

In many respects the volunteers are "survivors" with a desire for knowledge and an ability to work independently. Thanks to their backgrounds, they are already qualified and educated.

Evaluation

How to evaluate the impact of the volunteers' contribution to our activities? It is of course important and valuable as such that citizens participate in the activities of a science centre. As stated above, there are several other benefits in using volunteers as science communicators; their enthusiasm, expertise, experience and multiplicity. Our customer surveys also show that the visitors' satisfaction with the level of explainer services has risen significantly since 1998, when we started our volunteer programme.

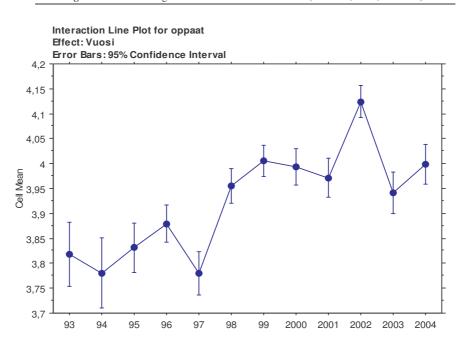


Figure 1: The level of guidance at Heureka 1993 – 2004 (H. Salmi, 2004; n: 15620).

The stories of two Heureka volunteers

Principal Risto Haatainen (38 years as a principal, three years as a volunteer at Heureka)

"When I retired three years ago, I had to plan a new kind of life. My intensive work life hadn't allowed hobbies, so I chose Heureka's volunteer scheme as one of my new hobbies. At Heureka, I've had the

M. Väkeväinen

pleasure to meet a highly professional working community and see the efficiency of team work as topquality own production science exhibitions, not to mention the multicultural visitors of all ages. In my work as a volunteer at the science centre, I can forward knowledge and science to children and young people just as I aimed to do in the school.

Heureka seems to operate with a small, dedicated and knowledgeable staff and with a very meager public funding support. Still Heureka is known and respected worldwide. I find it remarkable that I can bring my own small contribution to the Finnish science centre scene".

Ulla Lehtovirta (MSc, Metallurgy)

"My name is Ulla Lehtovirta and I'm a volunteer at Heureka. In 1991 I graduated from Helsinki University of Technology with an MSc in metallurgy. I worked for several years as a research engineer in e.g. solar energy product development at a large Finnish oil company.

My husband and I have three children, of which the two youngest have a long-term illness. This puts limits on our life and I can't go back to work even part-time. When I visited Heureka with my six-year-old son, I saw an advert for the Heureka volunteer scheme and realized that I had found a worthwhile hobby considering my professional background.

I have always liked technology and science. I find them fun, exciting and easy to approach. The number, extent and quality of Heureka's exhibitions have surprised me pleasantly over the last three and a half years. My own narrow, engineer-like way of looking at science has also expanded.

In my work as a Heureka volunteer I've been happy to notice that e.g. school children are very receptive and keen, when I stop to talk with them about the idea behind an exhibit. It is also rewarding to guide older visitors, as they may never have been at a science centre before. Every time I get a visitor to stay at an exhibit and try it out I know that he or she is a step closer to the joy of discovery – the thinking process has been set in motion.

Volunteer work is genuine customer service, which changes its form depending on the customer. It's a pleasure to notice that I can make a visitor understand more about Heureka's exhibits, find the joy of discovery and eventually come back to Heureka again.

My Heureka hobby has given me a lot to think about, happy experiences and energy for everyday life. The Heureka staff, including the volunteers, the science centre exhibitions and the visitors in particular are what make me keep up with my hobby".

Author

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